Climate Change and Human Health Literature Portal

National Institute of Environmental Health Sciences

Global warming and malaria: Knowing the horse before hitching the cart

Abstract:

Speculations on the potential impact of climate change on human health frequently focus on malaria. Predictions are common that in the coming decades, tens - even hundreds - of millions more cases will occur in regions where the disease is already present, and that transmission will extend to higher latitudes and altitudes. Such predictions, sometimes supported by simple models, are persuasive because they are intuitive, but they sidestep factors that are key to the transmission and epidemiology of the disease: the ecology and behaviour of both humans and vectors, and the immunity of the human population. A holistic view of the natural history of the disease, in the context of these factors and in the precise setting where it is transmitted, is the only valid starting point for assessing the likely significance of future changes in climate.

Source: http://dx.doi.org/10.1186/1475-2875-7-s1-s3

Resource Description

Exposure : ☒

weather or climate related pathway by which climate change affects health

 Unspecified Exposure

Geographic Feature: ☒

resource focuses on specific type of geography

 Tropical

Geographic Location: ☒

resource focuses on specific location

 Global or Unspecified

Health Impact: ☒

specification of health effect or disease related to climate change exposure

 Infectious Disease

  Infectious Disease: Vectorborne Disease

    Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Mitigation/Adaptation: ☒

mitigation or adaptation strategy is a focus of resource

 Adaptation

Model/Methodology: ☒

type of model used or methodology development is a focus of resource

 Methodology

Resource Type: ☒

format or standard characteristic of resource

 Review

Timescale: ☒

time period studied

 Time Scale Unspecified

Vulnerability/Impact Assessment: ☒

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

 A focus of content